



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6705G02231-3G

Job Sheet 168813



Part No: RBW6705G02231-3G

Job Qty: 2 ea

Part Name: Rigging Pin Assembly N3



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/23/17

Job Tracking No:

Due Date: 12/8/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea	12/7/17	12/7/17	0.00	0.00	Start Up Machining		ALL
100	Small Fab	2 pcs	12/7/17	12/7/17	0.00	0.67	Small Fab-9		MDC / Sc. - L. 17-12-1
110	QC	2 pcs	12/7/17	12/7/17	0.00	0.00	QC5		38
120	Outsource	2 pcs	12/7/17	12/7/17	0.00	0.00	Outsource1		9-89
130	Outsource	2 pcs	12/7/17	12/7/17	0.00	0.00	Outsource13		
140	Packaging	2 pcs	12/7/17	12/7/17	0.00	0.00	Packaging2		DAS
150	QC	2 pcs	12/7/17	12/7/17	0.00	0.00	QC6		38
160	Small Fab	2 pcs	12/8/17	12/8/17	0.00	0.33	Small Fab		9-89
170	QC	2 pcs	12/8/17	12/8/17	0.00	0.00	QC5		MLL
190	Packaging	2 pcs	12/8/17	12/8/17	0.00	0.00	Packaging3		GA SLP
200	QC21-SA	2 Ea	12/8/17	12/8/17	0.00	0.00	QC21		FEB 05 2018

Part Op 100 - 1- Bend as per dwg. 2- Cut rod to Finished length and drill hole as per dwg. 3- Grind chamfer on both end
Descriptions: 120 - 1--Issue P/O to Metcore ; P/O _____ RC: 26-30 2-Bead blast 3- Certificate of Conformity is required
NOTE DROP SHIP TO FINISHER To ship directly to Groupe Altech
130 - -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required
140 - C of C is required.
160 - - Install lanyard as per dwg.
170 - Black ink stamp T/N on flag to fit as per DWG.

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	8893K204	1	6	0	0
160-Small Fab	3896T31	4	32	0	0
	CL-2-C	2	41	0	0
	NAS1756-12	2	91	0	0

Part Specifications

Specifications could not be found.

Plex 11/23/17 10:35 AM Dart.lajeunesse.marie

Mill conv drill hole and deburr as per drawing

QCS

17.12.08

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

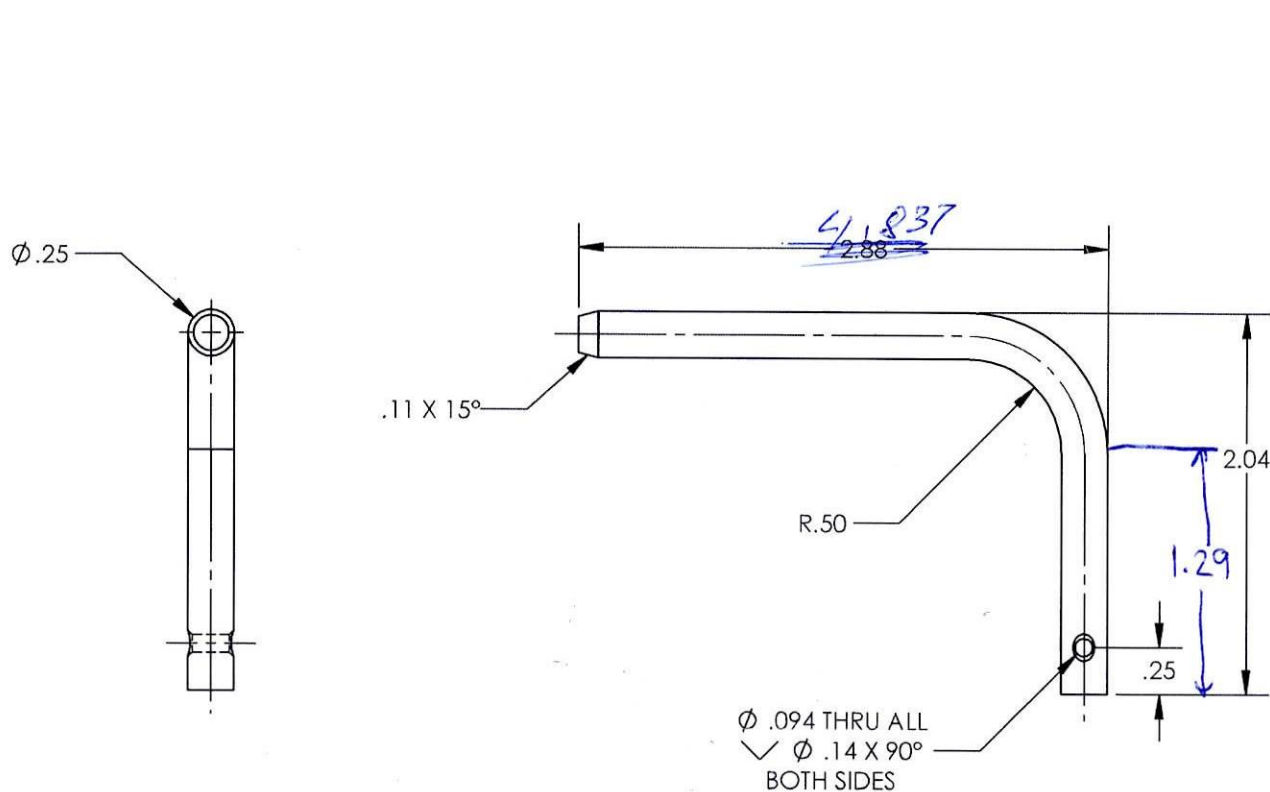
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Part No: RBW6705G02231-3G Operation: Start up Operation Revision: Change No: Mfg Date: 12/12/17 Job No: 168813 Rigging Pin Assembly N3 S020463 DART AEROSPACE							
Environm _____ De: _____ Doc/t _____ Equip/Toc _____ Handling/Pre _____ Material _____ Internal Transport _____ Tribal Knowledge _____ LOA _____ Substation _____ Past Expiry Date _____ Misidentified _____		Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	
				CATEGORY ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
OTHER : _____							

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-3 EXTENDED PIN SHORT END FROM 1.62 TO 2.04, ADDED Ø.094 HOLE FOR LANYARD.	10/9/2012	RJC	SE
2		-3 CH'D BEND RADIUS WAS R.56 IS R.50. UPDATED BOM QUANTITIES.	2/12/2013	BIM	GE
3	15-0096	-3 CORRECTED VIEW NO CHAMFER ON SHORT END OF PIN. -9 CH'D B/O INFO WAS REID #CL2C IS CARR-LANE #CL-2-C.	4/23/2015	RJC	JAG

TEO ATTACHED



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 168813415
171123

4.598 LG.

12/8/2017

(-3)
PIN N°2

DART AEROSPACE	
TITLE RIGGING PIN ASSY. N° 2	
DWG NO. RBW6705G02131-3G-3	REV 3
MAT'L O-1	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH CAD PLATE YELLOW
.X ± .1	SPEC QQ-P-416F, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AGUSTA
SCALE 1:1	DATE 1/28/2010 SHEET 2 OF 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : 12/8/2017	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
BEND STARTING MISSING OVERALL DIMENSION WHEN UNFOLD MISSING			DIMMENSIONS GIVED ON DRAWING		
			Completed By VPL		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			



ENGINEERING ORDER # TEO17-652

SCALE: NTS

SHEET 1 OF 1

DRAWING NO. RBW6705G02131-3G

REV: 3

EFF.: NEXT ORDER

CHANGE CATEGORY

TITLE: RIGGING PIN ASSY # 2

☐ MAJOR ☒ MINOR

DATE 17.09.13

APPROVED: WM 10/09/2017

MFG. APPR.: DP 09/26/2017

CHECKED: SAC 09/25/2017

DRAWN: VM 09/25/2017

TRANSACTION CODE (TC):

A-ADD C-CREATE
R-REVISE D-DELETE

REASON: PURCHASE # MISSING

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WAS: RBW6705G02131-3G-3 REV 3 PURCHASE # : ?

IS: RBW6705G02131-3G-3 REV 3 PURCHASE # : McMaster#8893K204

DOCUMENTS EFFECTED: ☐ PATTERN ☐ INSTALL INSTRUCTIONS ☒ BOM

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐				



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038769

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO038769
PO Date: 1/12/18
Due Date: 1/23/18

Purchase Order
Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

E-MAILED
JAN 15 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30

Freight Terms:

Special Comments: PARTS SHIP FROM METCOR FROM
PO:038630 & PO038680

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	168814	RBW6705G02331-3G	Rigging Pin Assembly N4 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	1/23/18	1 pcs	0 pcs	1 pcs	\$12.857142/pcs	\$12.86
2	168918	RB500N9505-1M-1	Socket -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	1/23/18	1 pcs	0 pcs	1 pcs	\$120.00/pcs	\$120.00
3	168807	RBW6705G02031-3G	Rigging Pin Assembly N1 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	1/23/18	1 pcs	0 pcs	1 pcs	\$12.857142/pcs	\$12.86
4	168813	RBW6705G02231-3G	Rigging Pin Assembly N3 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	1/23/18	2 pcs	0 pcs	2 pcs	\$12.857142/pcs	\$25.71
5	168809	RBW6705G02131-3G	Rigging Pin Assembly N2 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	1/23/18	3 pcs	0 pcs	3 pcs	\$12.857142/pcs	\$38.57

Grand Total: \$210.00



Certificat de Conformité / Certificate of Compliance

(005774-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

005774- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
22-Jan-2018		Curtis Anderson		38769				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBW6705G02331-3G Rev.	RBW6705G02331-3G ZINC CLEAR ASTM B633 TYPE 1, SC2 C OF C REQUIRED	ZINC CH	1	1	0	0	0
2	RB500N9505-1M-1 Rev.	RB500N9505-1M-1 BLACK OXIDE MIL-C-13924C, CLASS 1 C OF C REQUIRED	BLACK-OXIDE CH	1	1	0	0	0
3	RBW6705G02031-3G Rev.	RBW6705G02031-3G ZINC CLEAR ASTM B633, TYPE 1, SC 2 C OF C REQUIRED	ZINC CH	1	1	0	0	0
4	RBW6705G02231-3G Rev.	RBW6705G02231-3G ZINC-CLEAR ASTM B633, TYPE 1, SC2 C OF C REQUIRED	ZINC CH	2	2	0	0	0
5	RBW6705G02131-3G Rev.	RBW6705G02131-3G ZINC-CLEAR ASTM B633, TYPE 1, SC2 C OF C REQUIRED	ZINC CH	3	3	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.